



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

June 23, 2011

Via E-Mail

Richard McGee
PAA Natural Gas Storage, L.P.
333 Clay Street, Suite 1500
Houston, Texas 77002

**Re: PAA Natural Gas Storage, L.P.
Registration Statement on Form S-3
Filed May 27, 2011
File No. 333-174590**

Dear Mr. McGee:

We have limited our review of your registration statement to those issues we have addressed in our comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. Where you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Description of Our Debt Securities, page 5

1. We note your references to guarantors and guarantees; however, you have not registered any guarantees or listed any guarantors in the registration statement. Please advise.

Selling Unitholder, page 40

2. We note that the selling unitholder in the resale offering holds a majority interest in PAA Natural Gas Storage, L.P. and is the sole member of your general partner. You disclose that as of May 25, 2011, there were 59,184,450 common units outstanding, and that Plains All American Pipeline, L.P. is offering for resale 28,214,198 common units. Because of the size of the proposed resale offering relative to the number of units held by non-affiliates, as well as the relationship between you and the selling unitholder, it appears that this transaction may not be eligible to be made on a shelf basis under Rule 415(a)(1)(i) and instead represents a primary offering. Please identify the selling unitholder as an underwriter and the offering as a primary offering. Alternatively, please

advise us of your basis for determining that the transaction is eligible under Rule 415(a)(1)(i). See Question 212.15 and Interpretation 612.09 of our Securities Act Rules Compliance and Disclosure Interpretations available on our website at www.sec.gov/divisions/corpfin/guidance/securitiesactrules-interps.htm.

3. In the footnotes to your table, please identify the natural persons or the publicly registered companies who exercise sole or shared voting or investment powers with respect to the units being offered by the selling unitholder. Refer to Question 140.02 of our Regulation S-K Compliance and Disclosure Interpretations available on our website at www.sec.gov/divisions/corpfin/guidance/regs-kinterp.htm.
4. Please disclose whether the selling unitholder is a broker-dealer or an affiliate of a broker-dealer.
5. Please revise your disclosure to provide additional details regarding the transactions in which the selling unitholder acquired its units, including the material terms of the agreements relating to the transactions.

Item 16. Exhibits and Financial Statement Schedules, page II-1

(a) Exhibits, page II-1

6. Please revise your registration statement to incorporate by reference as exhibits any purchase agreements through which the selling unitholder acquired its units.

Exhibit 5.1

7. In the first paragraph, please quantify the amount of Units and Debt Securities being offered.
8. Please revise assumptions (3) through (5) to apply only to the Units and the Debt Securities, not the Selling Units.
9. Please remove the parenthetical qualifications in opinions (1) and (3) in the fifth paragraph, as inappropriate.
10. We note that qualification (4) in the penultimate paragraph includes a limitation to the Delaware Limited Partnership Act. Please revise the limitation so that it also includes all applicable Delaware statutory provisions, as well as reported judicial decisions interpreting the Act.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in

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possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Ramin M. Olson, Staff Attorney, at (202) 551-3331, Brigitte Lippmann, Special Counsel, at (202) 551-3713 or me at (202) 551-3720 with any other questions you may have.

Sincerely,

/s/ Brigitte Lippmann for

H. Christopher Owings
Assistant Director